In the claims

Please amend the claims as follows:

1. (Currently Amended): A process of treating a metallic bone implant consisting essentially of treating the metallic bone implant with a solution of hydrofluoric acid, which solution has a pH in the range of 1.6 to 3.0, for a period of time and at a temperature selected according to the pH of the solution without causing significant etching of the implant.

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2. (Currently Amended): A process of treating a metallic bone implant consisting essentially of treating the metallic bone implant with a solution of hydrofluoric acid in which the concentration of hydrofluoric acid is greater than 0% and up to 3%, for a period of time and at a temperature selected according to the concentration of the solution without causing significant etching of the implant.

3. (Original): A process as claimed in claim 2 in which the concentration of hydrofluoric acid is 0.1% to 2.0%.

4. (Original): A process as claimed in claim 2 in which the concentration of hydrofluoric acid is 0.2% to 2.0%.

5. (Original): A process as claimed in claim 2 in which the concentration of hydrofluoric acid is approximately 0.2%.

6. (Original): A process as claimed in claim 1 in which the treatment is carried out for a period of at least 10 seconds.

7. (Original): A process as claimed in claim 6 in which the treatment is carried out for a period of 10 seconds to 2 minutes.

8. (Currently Amended): A process of treating a metallic bone implant consisting essentially of treating the metallic bone implant with an aqueous solution of hydrofluoric acid in which the concentration of hydrofluoric acid is 0.1% to 2.0% at room temperature for a period of up to 3 minutes, for a period of time and at a temperature selected according to the concentration of the solution without causing significant etching of the implant.

9. (Original): A process as claimed in claim 8 in which the concentration of hydrofluoric acid is 0.2% to 2.0%.

10. (Currently Amended): A process of treating a metallic bone implant consisting essentially of treating the metallic bone implant with an aqueous solution containing fluoride ions in a concentration of greater than 0% and up to 3%, said aqueous solution being free from sodium and sodium ions, for a period of time and at a temperature selected according to the concentration of the solution without causing significant etching of the implant.

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Claims 11-15 (Previously withdrawn)

16. (Currently Amended): A process of treating a metallic bone implant consisting essentially of treating the implant with a solution of hydrofluoric acid which has a pH in the range of 1.6 to 3.0 for a duration sufficient for the implant to be able to promote a greater degree and strength of bone tissue contact therewith than an untreated implant after a predetermined implantation time in a bone tissue structure, said duration being selected, and said treating being at a temperature selected, according to the pH of the solution without causing significant etching of the implant.

17. (Currently Amended): A process of treating a metallic bone implant consisting essentially of treating the implant with a solution of hydrofluoric acid which has a

concentration of hydrofluoric acid greater than 0% and up to 3% for a duration sufficient for the implant to be able to promote a greater degree and strength of bone tissue contact therewith than an untreated implant after a predetermined implantation time in a bone tissue structure, for a period of time and at a temperature selected according to the concentration of the solution without causing significant etching of the implant.

18. (Currently Amended): A process of treating a metallic bone implant consisting essentially of treating the implant with an aqueous solution which contains fluoride ions in a concentration greater than 0% and up to 3% and is free from sodium and sodium ions for a duration sufficient for the implant to be able to promote a greater degree and strength of bone tissue contact therewith than an untreated implant after a predetermined implantation time in a bone tissue structure, said duration being selected, and said treating being at a temperature selected, according to the concentration of the solution without causing significant etching of the implant.

19. (Original): The process of claim 2 wherein the concentration of hydrofluoric acid is greater than 0.01%.

20. (Original): A process as claimed in claim 1 in which the surface of the metallic bone implant after the treatment with the hydrofluoric acid solution has essentially the same morphology as the surface of the implant before said treatment.

21. (Original): A process as claimed in claim 2 in which the surface of the metallic bone implant after the treatment with the hydrofluoric acid solution has essentially the same morphology as the surface of the implant before said treatment.

22. (Original): A process as claimed in claim 8 in which the surface of the metallic bone implant after the treatment with the hydrofluoric acid solution has essentially the same morphology as the surface of the implant before said treatment.

23. (Original): A process as claimed in claim 10 in which the surface of the metallic bone implant after the treatment with the aqueous solution containing fluoride ions has essentially the same morphology as the surface of the implant before said treatment.

24. (Original): A process as claimed in claim 16 in which the surface of the metallic bone implant after the treatment with the hydrofluoric acid solution has essentially the same morphology as the surface of the implant before said treatment.

25. (Original): A process as claimed in claim 17 in which the surface of the metallic bone implant after the treatment with the hydrofluoric acid solution has essentially the same morphology as the surface of the implant before said treatment.

26. (Original): A process as claimed in claim 18 in which the surface of the metallic bone implant after the treatment with the aqueous solution containing fluoride ions has essentially the same morphology as the surface of the implant before said treatment.

27. (Original): A process as claimed in claim 1, wherein said metallic bone implant has a surface layer constituted by a metallic oxide.

28. (Original): A process as claimed in claim 2, wherein said metallic bone implant has a surface layer constituted by a metallic oxide.

29. (Original): A process as claimed in claim 8, wherein said metallic bone implant has a surface layer constituted by a metallic oxide.

30. (Original): A process as claimed in claim 10, wherein said metallic bone implant has a surface layer constituted by a metallic oxide.

31. (Original): A process as claimed in claim 16, wherein said metallic bone implant has a surface layer constituted by a metallic oxide.

32. (Original): A process as claimed in claim 17, wherein said metallic bone implant has a surface layer constituted by a metallic oxide.

33. (Original): A process as claimed in claim 18, wherein said metallic bone implant has a surface layer constituted by a metallic oxide.

34. (Original): A process as claimed in claim 27, wherein said metallic bone implant is constituted by titanium or a titanium alloy, and said metallic oxide is a titanium oxide.

35. (Original): A process as claimed in claim 28, wherein said metallic bone implant is constituted by titanium or a titanium alloy, said metallic oxide is a titanium oxide.

36. (Original): A process as claimed in claim 29, wherein said metallic bone implant is constituted by titanium or a titanium alloy, and said metallic oxide is a titanium oxide.

37. (Original): A process as claimed in claim 30, wherein said metallic bone implant is constituted by titanium or a titanium alloy, and said metallic oxide is a titanium oxide.

38. (Original): A process as claimed in claim 31, wherein said metallic bone implant is constituted by titanium or a titanium alloy, and said metallic oxide is a titanium oxide.

39. (Original): A process as claimed in claim 32, wherein said metallic bone implant is constituted by titanium or a titanium alloy, and said metallic oxide is a titanium oxide.

40. (Original): A process as claimed in claim 33, wherein said metallic bone implant is constituted by titanium or a titanium alloy, and said metallic oxide is a titanium oxide.

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41. (Original): A process as claimed in claim 1, comprising a further step, performed after said treatment with the hydrofluoric acid, wherein the implant is treated with a solution comprising calcium ions.

42. (Original): A process as claimed in claim 2, comprising a further step, performed after said treatment with the hydrofluoric acid, wherein the implant is treated with a solution comprising calcium ions.

43. (Original): A process as claimed in claim 8, comprising a further step, performed after said treatment with the hydrofluoric acid, wherein the implant is treated with a solution comprising calcium ions.

44. (Original): A process as claimed in claim 10, comprising a further step, performed after said treatment with the hydrofluoric acid, wherein the implant is treated with a solution comprising calcium ions.

45. (Original): A process as claimed in claim 16, comprising a further step, performed after said treatment with the hydrofluoric acid, wherein the implant is treated with a solution comprising calcium ions.

46. (Original): A process as claimed in claim 17, comprising a further step, performed after said treatment with the hydrofluoric acid, wherein the implant is treated with a solution comprising calcium ions.

47. (Original): A process as claimed in claim 18, comprising a further step, performed after said treatment with the hydrofluoric acid, wherein the implant is treated with a solution comprising calcium ions.

48. (Original): A process as claimed in claim 34, comprising a further step, performed after said treatment with the hydrofluoric acid, wherein the implant is treated with a solution comprising calcium ions.

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49. (Original): A process as claimed in claim 35, comprising a further step, performed after said treatment with the hydrofluoric acid, wherein the implant is treated with a solution comprising calcium ions.

50. (Original): A process as claimed in claim 36, comprising a further step, performed after said treatment with the hydrofluoric acid, wherein the implant is treated with a solution comprising calcium ions.

51. (Original): A process as claimed in claim 37, comprising a further step, performed after said treatment with the hydrofluoric acid, wherein the implant is treated with a solution comprising calcium ions.

52. (Original): A process as claimed in claim 38, comprising a further step, performed after said treatment with the hydrofluoric acid, wherein the implant is treated with a solution comprising calcium ions.

53. (Original): A process as claimed in claim 39, comprising a further step, performed after said treatment with the hydrofluoric acid, wherein the implant is treated with a solution comprising calcium ions.

54. (Original): A process as claimed in claim 40, comprising a further step, performed after said treatment with the hydrofluoric acid, wherein the implant is treated with a solution comprising calcium ions.

Claims 55-64 (Previously withdrawn)

65. (Original): A process as claimed in claim 1, which improves the biocompatibility of in bone tissue.

66. (Original): A process as claimed in claim 1, which improves the rate of bone tissue attachment of said metallic bone implant.

67. (Original): A process as claimed in claim 2, which improves the biocompatibility of in bone tissue.

68. (Original): A process as claimed in claim 2, which improves the rate of bone tissue attachment of said metallic bone implant.

69. (Original): A process as claimed in claim 8, which improves the biocompatibility of in bone tissue.

70. (Original): A process as claimed in claim 8, which improves the rate of bone tissue attachment of said metallic bone implant.

71. (Original): A process as claimed in claim 10, which improves the biocompatibility of in bone tissue.

72. (Original): A process as claimed in claim 10, which improves the rate of bone tissue attachment of said metallic bone implant.

73. (Original): A process as claimed in claim 16, which improves the biocompatibility of in bone tissue.

74. (Original): A process as claimed in claim 16, which improves the rate of bone tissue attachment of said metallic bone implant.

75. (Original): A process as claimed in claim 17, which improves the biocompatibility of in bone tissue.

76. (Original): A process as claimed in claim 17, which improves the rate of bone tissue attachment of said metallic bone implant.

77. (Original): A process as claimed in claim 18, which improves the biocompatibility of in bone tissue.

78. (Original): A process as claimed in claim 18, which improves the rate of bone tissue attachment of said metallic bone implant.

79. (New) A process of treating a metallic bone implant consisting essentially of treating the metallic bone implant with a solution of hydrofluoric acid in which the concentration of hydrofluoric acid is between 0.01% and 0.5%.

80. (New) The process of claim 79 wherein the concentration of hydrofluoric acid is between 0.1% and 0.5%.

81. (New) The process of claim 79 wherein the concentration of hydrofluoric acid is between 0.2% and 0.5%.